Atty. Dkt. No. 03CR418/KE (047141-0350) RECEIVED

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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.   (Currently Amended) A method of adapting a communication link in a network of radio communication nodes based on open loop and closed loop communication between a first node and a monitoring node, comprising:

sending by a first node a first radio communication to a monitoring node;

receiving by the monitoring node the a first radio communication and a second radio communication from the first node, wherein the first radio communication is open loop and the second radio communication is closed loop;

estimating by the monitoring node the dynamics of a communications channel based on a link metric of at least the first radio communication and the second radio communication;

categorizing the dynamics of the communications channel into one of at least a first state, a second state and a third state two groups, based on the estimate; and

selecting, based on a chosen group state, the weighted use of either closed loop link adaptation or and open loop link adaptation of communication link parameters; and wherein the monitoring node is a last open loop output peer node.

2.   (Currently Amended) The method of claim 1, wherein one of the at least first, second and third states two groups include at least one of is a static group state, and a dynamic state.

3.   (Currently Amended) The method of claim 1, wherein the weighted use of communication link parameters is table driven. one of the two groups is a dynamic group.

4.   (Currently Amended) The method of claim 1, wherein the link metric is one or more link metrics are normalized based on one or more communication link parameters. a received signal strength indicator (RSSI).

-2-

MILW_2733093.2

Atty. Dkt. No. 03CR418/KE (047141-0350)

5.   (Currently Amended) The method of claim +4, wherein the at least one or more of the communication parameters is communicated to the monitoring node from the first node in the first radio communication. link metric is a signal to noise ratio (SNR).

6.   (Currently Amended) The method of claim 1, wherein the link metric includes at least one of is a received signal strength indicator (RSSI), a signal to noise ratio (SNR), and a symbol error rate (SER).

7.   (Original) The method of claim 1, wherein the first radio communication includes a message header with a transmission power indicator.

8.   (Original) The method of claim 1, wherein the communication link parameters comprise at least one of transmit power, modulation type, and forward error correction (FEC).

9.   (Currently Amended) A method of changing communication link adaptation techniques in a network of radio communication nodes, comprising:

  . detecting interference by utilizing a monitoring node that receives communication signals in an open loop mode;

          estimating, using an open loop estimator, a channel dynamics dynamic;

          categorizing the channel dynamic into one of at least a first state, a second state and a third state, based on the estimate; and

          determining, based on a chosen state, whether the degree to which transmission parameters should be adjusted based on by open loop metrics or and closed loop metrics, based on the channel dynamics; and

          wherein the monitoring node is a last open loop output peer node.

10.   (Currently Amended) The method of claim 9, further comprising:

  . adjusting the transmission parameters predominantly based on open loop metrics when the first state the chosen state.

MILW_2733093.2

11.   (Currently Amended) The method of claim ~~10~~ 9, further comprising:

adjusting the transmission parameters <u>predominantly</u> based on closed loop

metrics <u>when the second state the chosen state</u>.

12.   (Currently Amended) The method of claim 9, <u>further comprising:</u>

<u>adjusting the transmission parameters based on both open loop metrics and</u>

<u>closed loop metrics when the third state the chosen state.</u> ~~wherein the open loop estimator~~

~~uses a received signal strength indicator (RSSI).~~

13.   (Currently Amended) The method of claim 9, wherein the <u>degree to which</u>

<u>transmission parameters should be adjusted by open loop metrics and closed loop metrics is</u>

<u>table driven</u> ~~open loop estimator uses a signal to noise ratio (SNR)~~.

14.   (Currently Amended) The method of claim 9, wherein the open loop estimator

uses <u>at least one of a received signal strength indicator (RSSI), a signal to noise ratio (SNR),</u>

<u>and</u> a symbol error rate (SER).

15.   (Previously Presented) The method of claim 9, further comprising:

receiving a radio communication having a message header with a transmission

power indicator.

16.   (Previously Presented) The method of claim 9, wherein the transmission

parameters comprise at least one of transmit power, modulation type, and forward error

correction (FEC).

17.   (Currently Amended) A monitoring node in a radio node communication

system ~~including~~, <u>wherein the monitoring node is configured to receive a first radio</u>

<u>communication from a first node, the monitoring node comprising:</u>

<u>an estimator module for estimating the dynamics of a communications channel</u>

<u>based on a link metric of at least the first radio communication;</u>

<u>a categorization module coupled to the estimator module and configured to</u>

<u>categorize the dynamics of the communications channel into one of at least a first state, a</u>

<u>second state and a third state, based on the estimate; and</u>

-4-

Atty. Dkt. No. 03CR418/KE (047141-0350)

an adaptation module coupled to the categorization module and configured to select, based on a chosen state, the weighted use of closed loop link adaptation and open loop link adaptation of communication link parameters.

~~a first radio node, the first radio node configured to send a first radio communication to the monitoring node and a second radio node;~~

~~the monitoring node comprising a processor for generating an open loop metric to estimate channel dynamics, and determining, based on the channel dynamics, a transmission parameter adjustments based on one of the open loop metrics or closed loop metrics; and~~

~~wherein the monitoring node is a last open loop output peer node.~~

18.   (Original) The system of claim 17, wherein the transmission parameters comprise at least one of transmit power, modulation type, and forward error correction (FEC).

19.   (Currently Amended) The system of claim 17, wherein the weighted use of communication link parameters is table driven. ~~the first radio node comprises a radio transceiver and the second radio node comprises a radio transceiver.~~

20.   (Original) The system of claim 17, wherein the estimate utilizes transmission power indicator information from the first radio node.

21.   (Previously Presented) The system of claim 1, further comprising sending by the first node the first radio communication to at least a second node.

MILW_2733093.2